

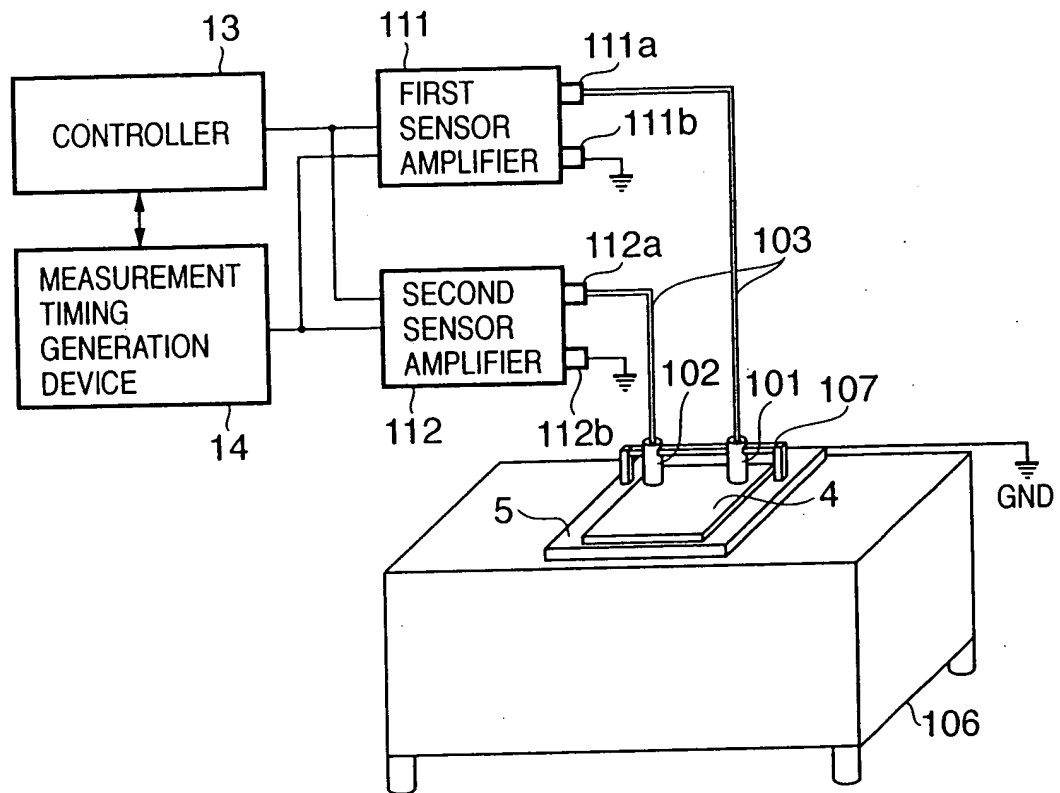
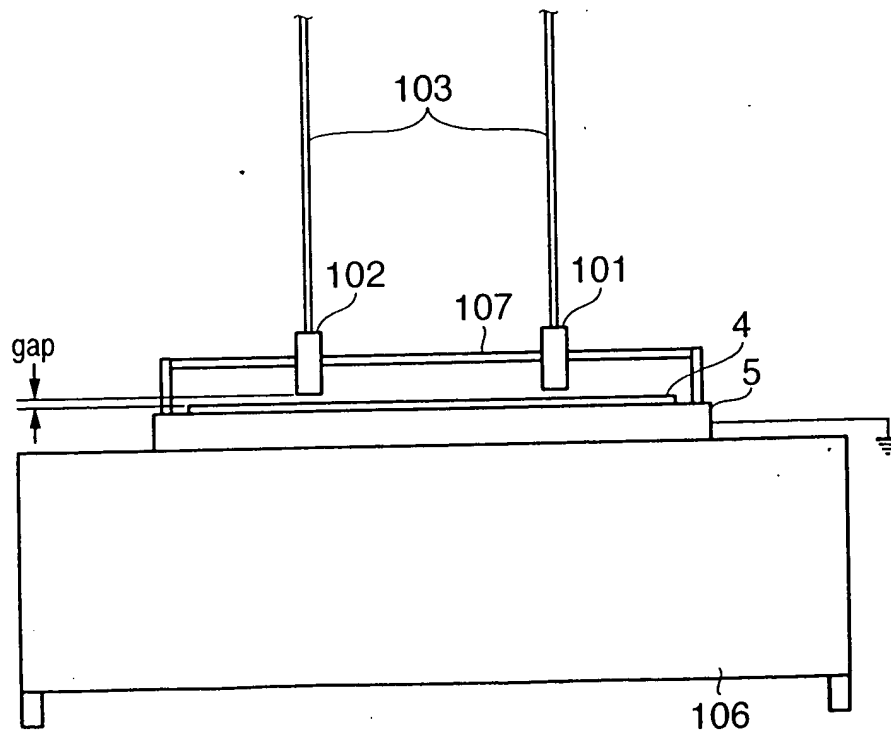
FIG. 1A**FIG. 1B**

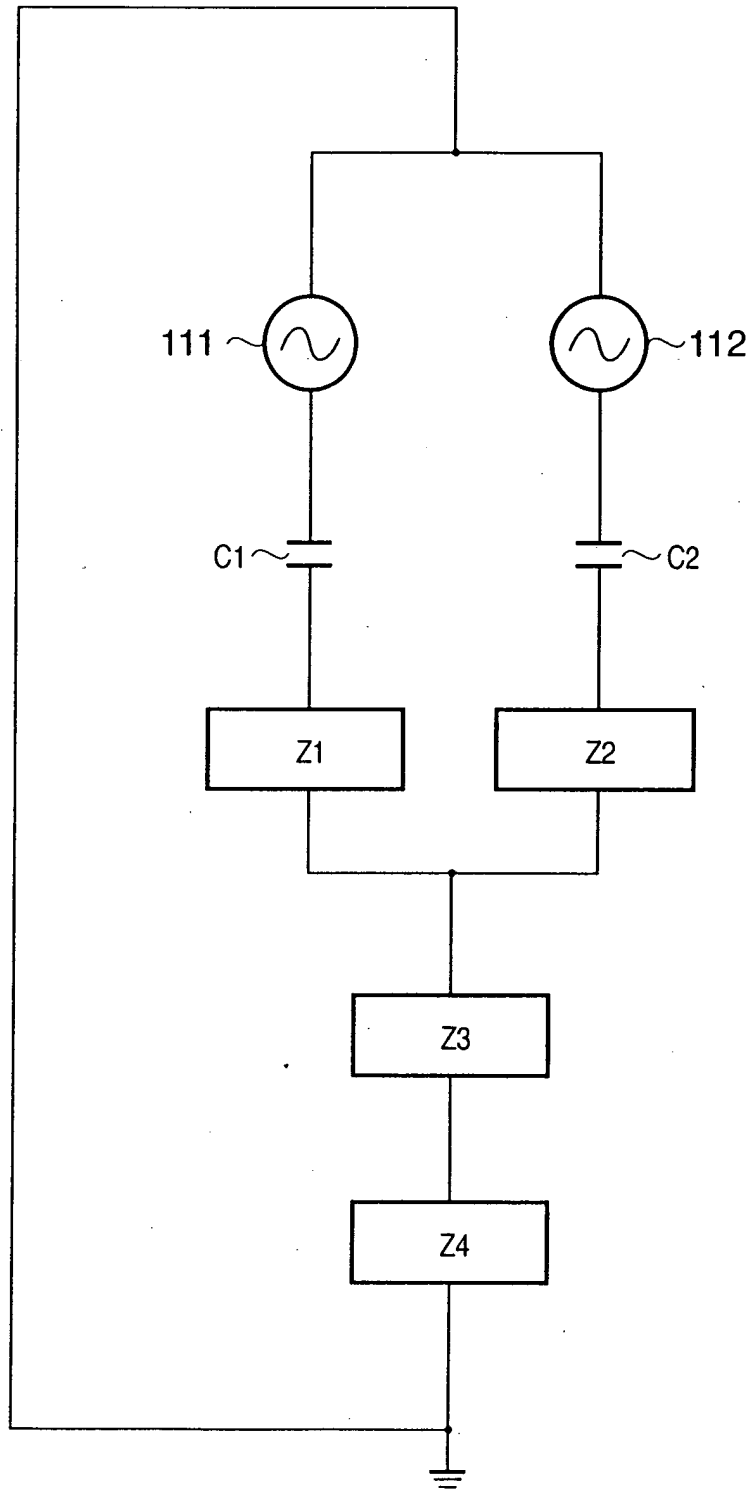
FIG. 2

FIG. 3A DRIVE CURRENT OF SENSOR PROBE 101



FIG. 3B DRIVE CURRENT OF SENSOR PROBE 102



FIG. 3C DRIVE TIMING SIGNAL OF SENSOR 101



FIG. 3D DRIVE TIMING SIGNAL OF SENSOR 102



FIG. 3E MEASUREMENT TIMING SIGNAL OF SENSOR 101

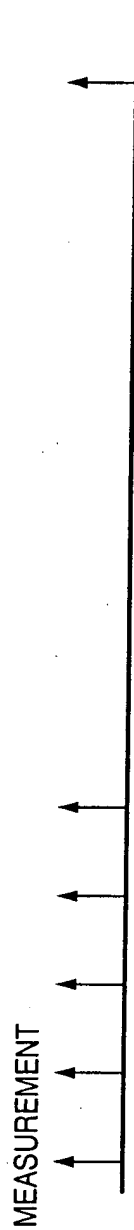


FIG. 3F MEASUREMENT TIMING SIGNAL OF SENSOR 102

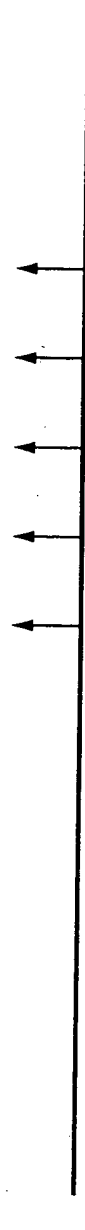


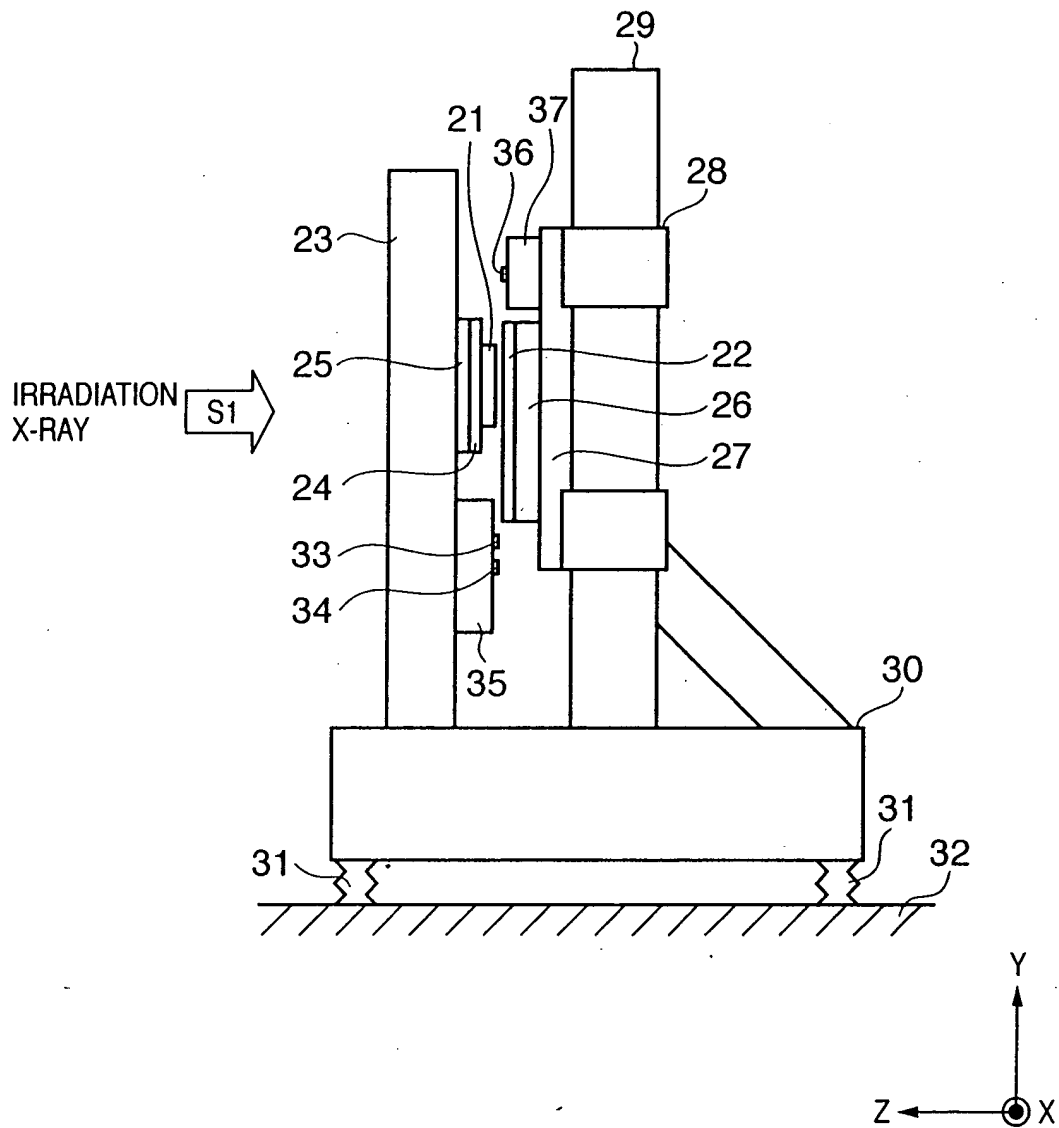
FIG. 4

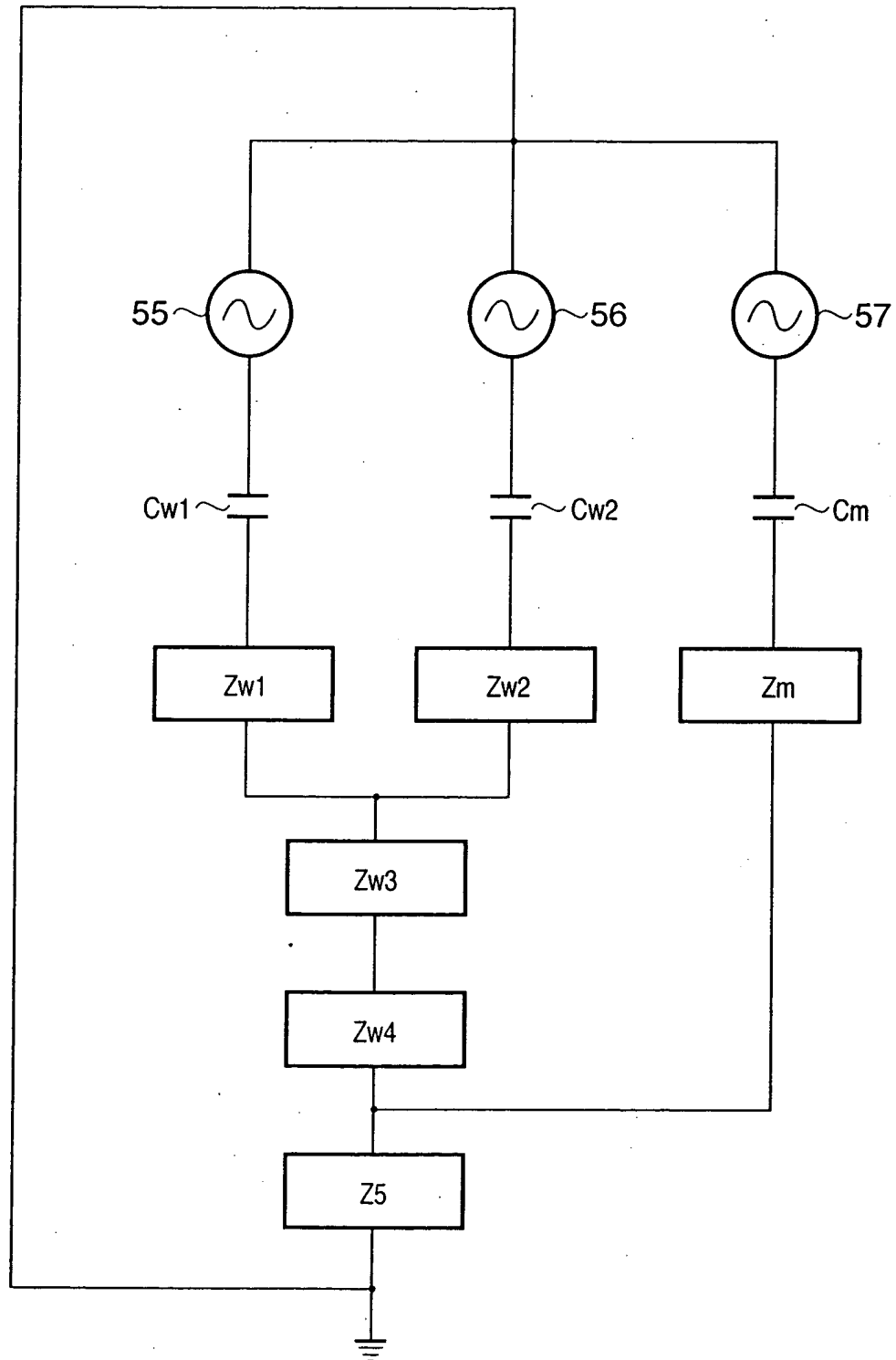
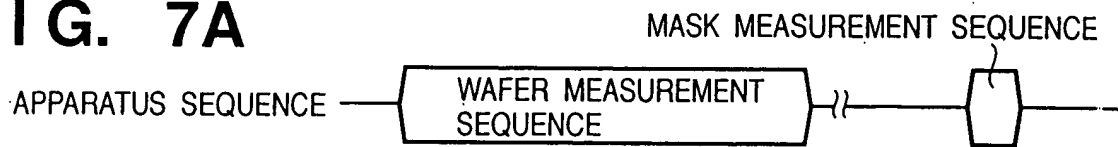
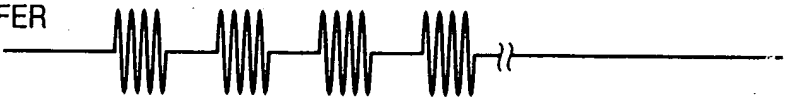
FIG. 6

FIG. 7A**FIG. 7B**

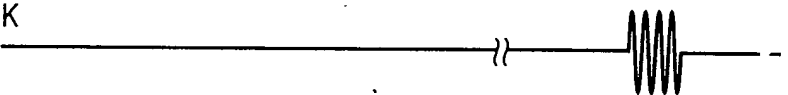
DRIVE CURRENT OF WAFER
MEASUREMENT SENSOR
PROBE 33

**FIG. 7C**

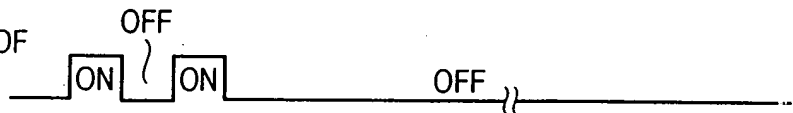
DRIVE CURRENT OF WAFER
MEASUREMENT SENSOR
PROBE 34

**FIG. 7D**

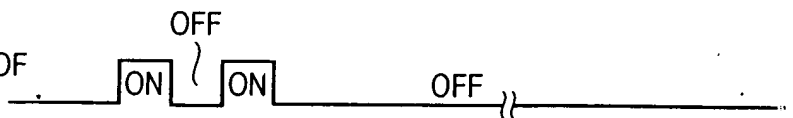
DRIVE CURRENT OF MASK
MEASUREMENT SENSOR
PROBE 36

**FIG. 7E**

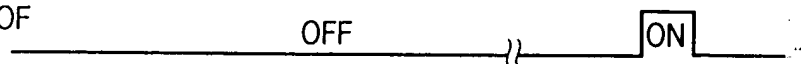
DRIVE TIMING SIGNAL OF
WAFER MEASUREMENT
SENSOR 33

**FIG. 7F**

DRIVE TIMING SIGNAL OF
WAFER MEASUREMENT
SENSOR 34

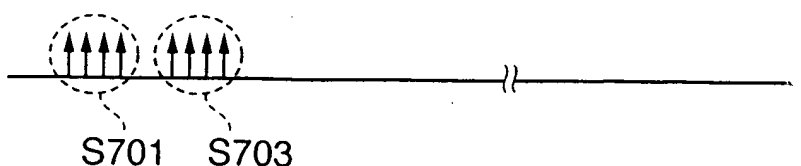
**FIG. 7G**

DRIVE TIMING SIGNAL OF
MASK MEASUREMENT
SENSOR 36

**FIG. 7H**

MEASUREMENT

MEASUREMENT TIMING
SIGNAL OF WAFER
MEASUREMENT
SENSOR 33



8/24

FIG. 8A

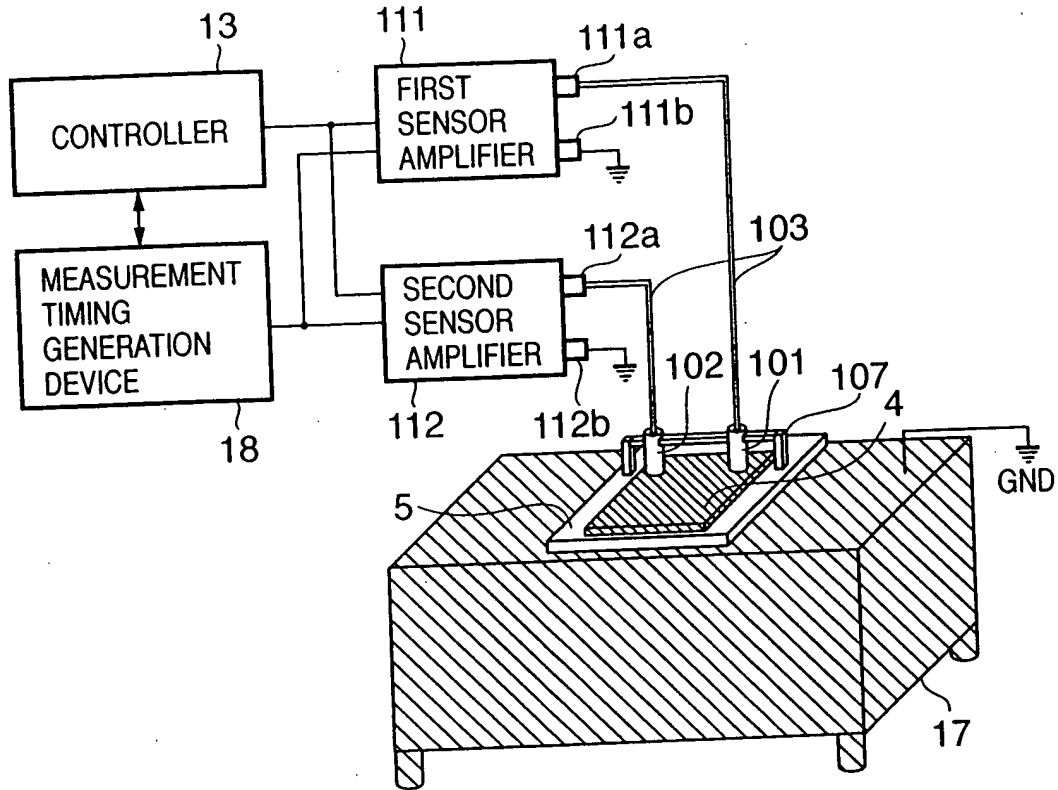
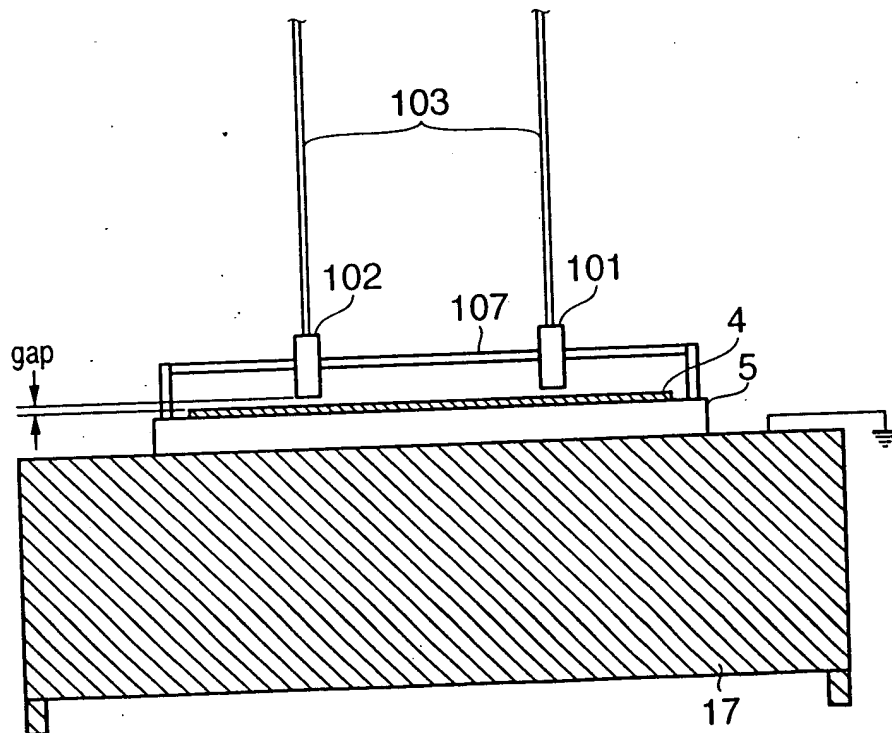


FIG. 8B



BEST AVAILABLE COPY

9/24

FIG. 9

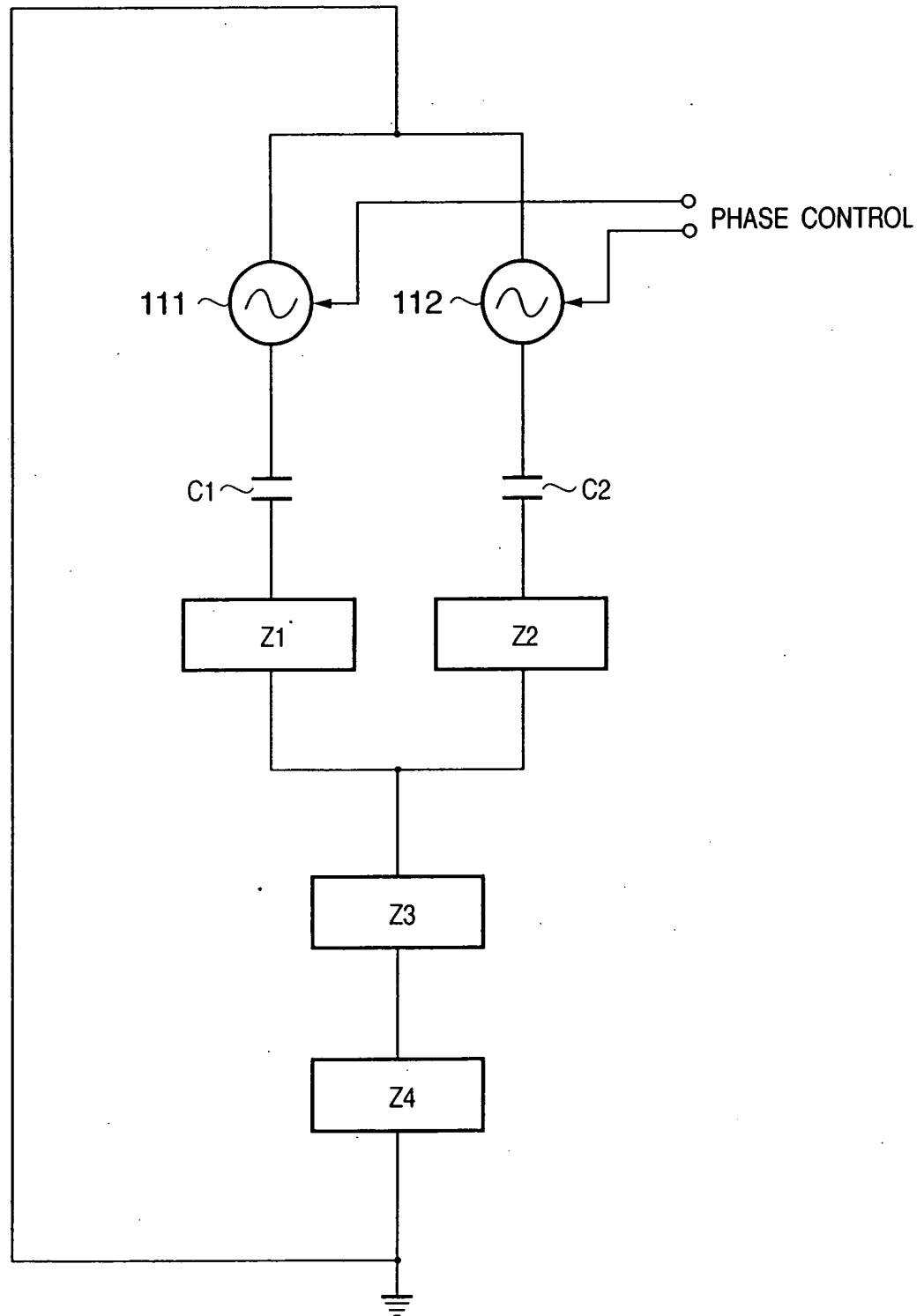


FIG. 10A DRIVE CURRENT OF FIRST SENSOR PROBE

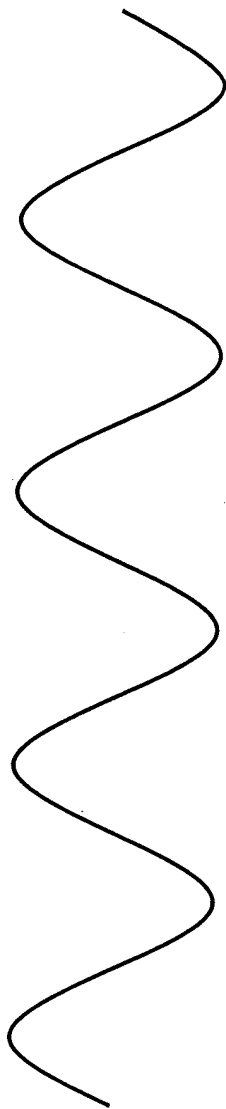


FIG. 10B DRIVE CURRENT OF SECOND SENSOR PROBE

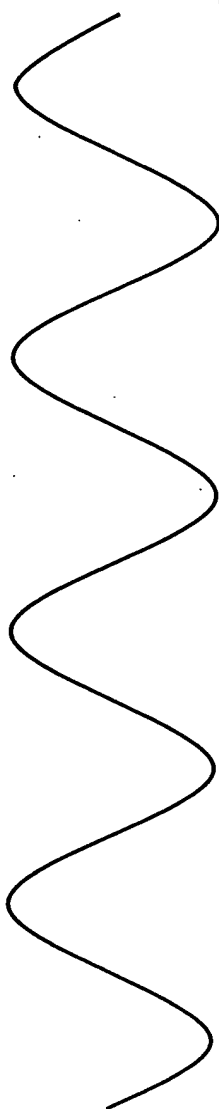


FIG. 10C GROUND CURRENT



FIG. 10D MEASUREMENT VALUE OF FIRST SENSOR



FIG. 10E MEASUREMENT VALUE OF SECOND SENSOR



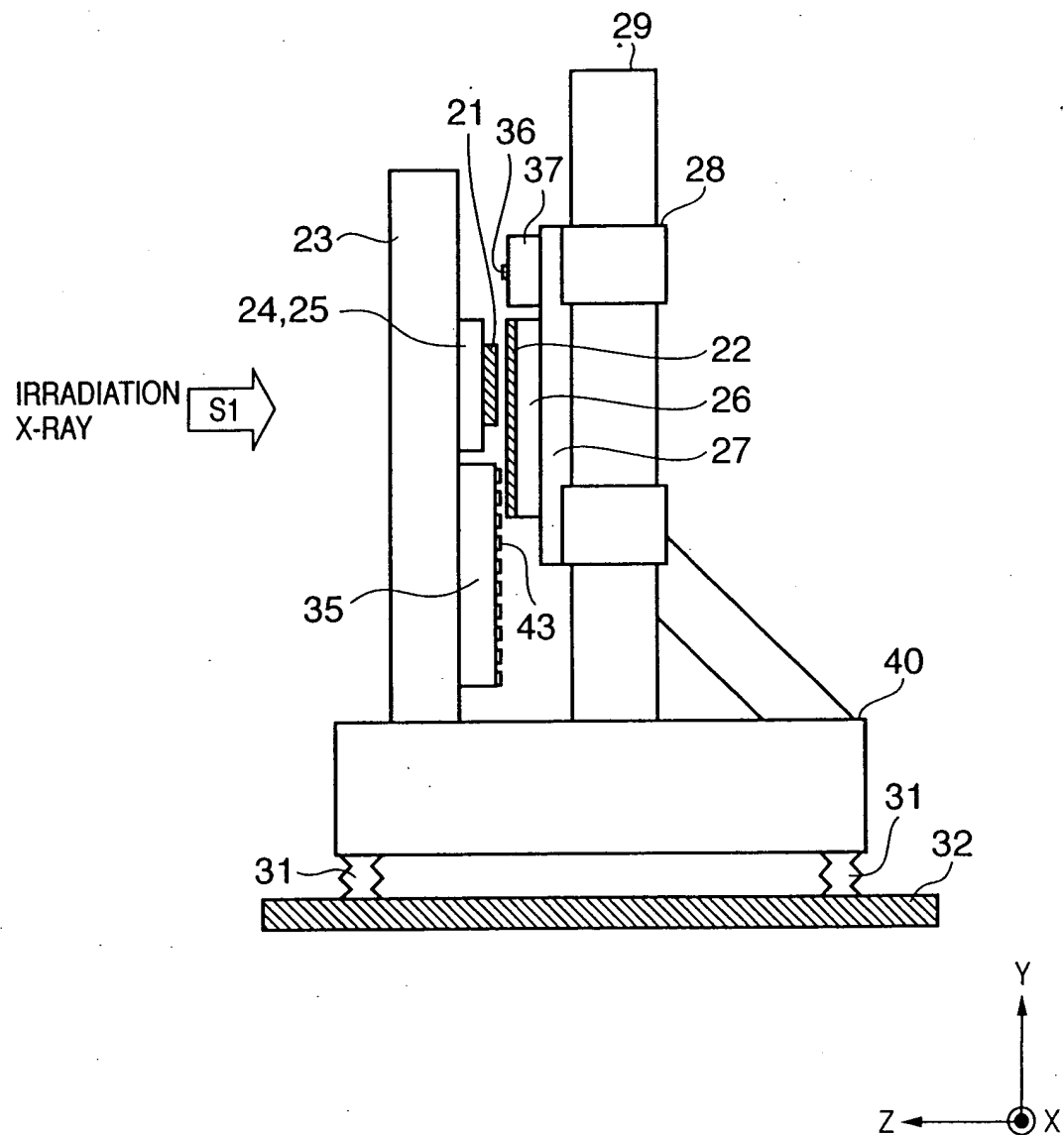
FIG. 11

FIG. 12

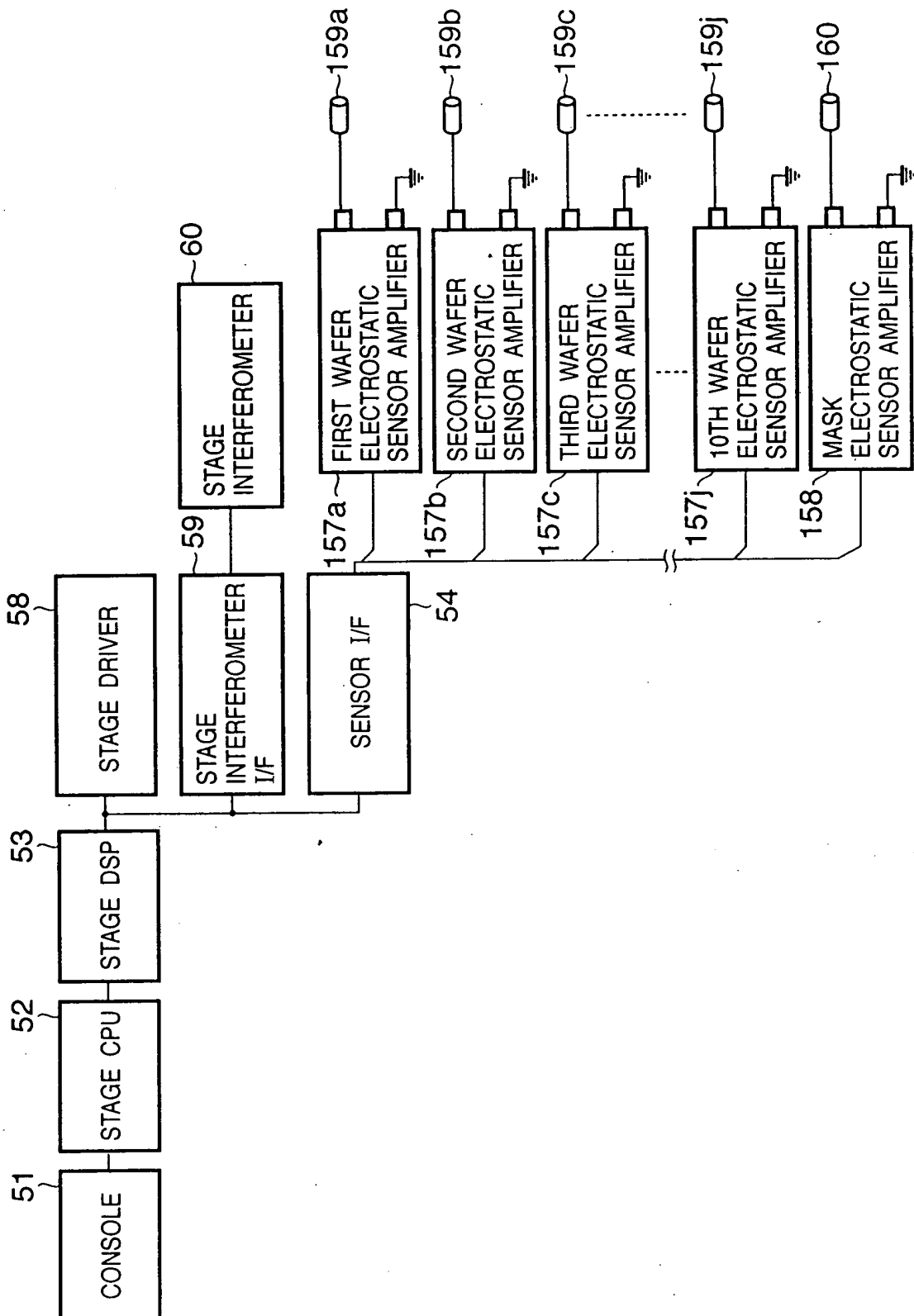


FIG. 13

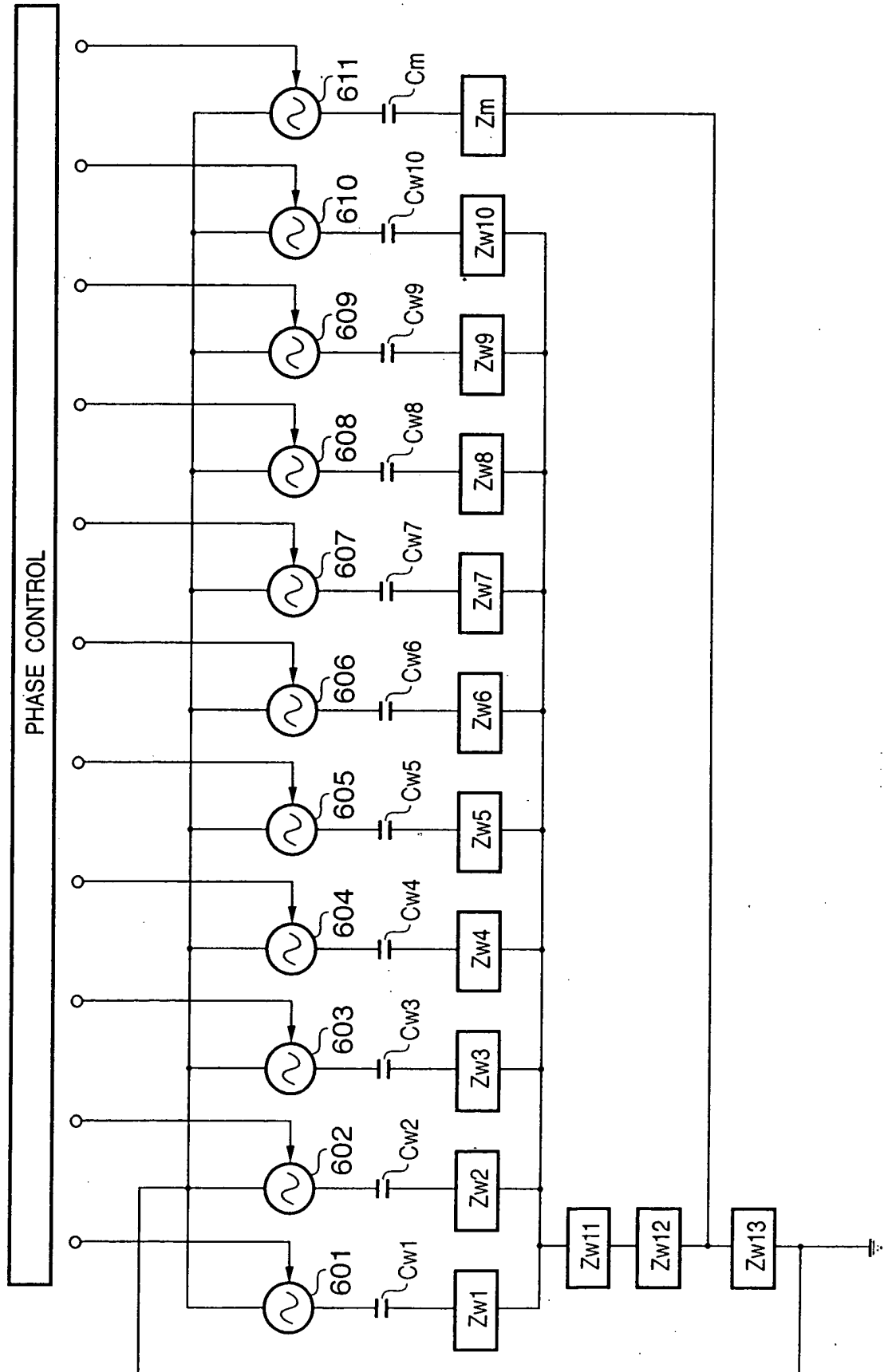


FIG. 14A

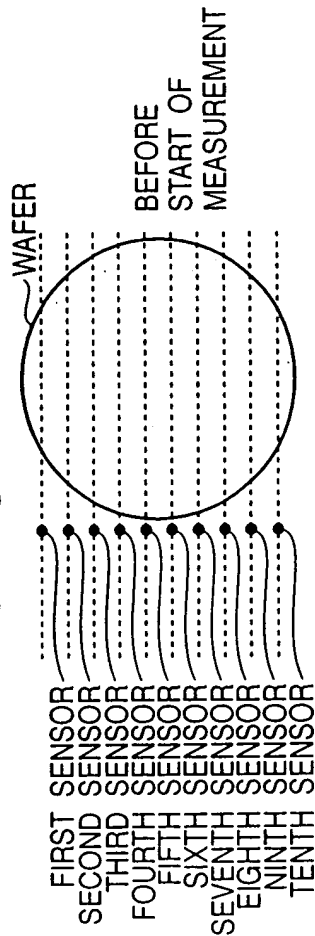


FIG. 14B

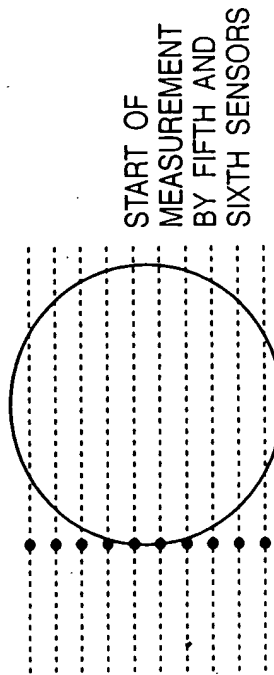


FIG. 14C

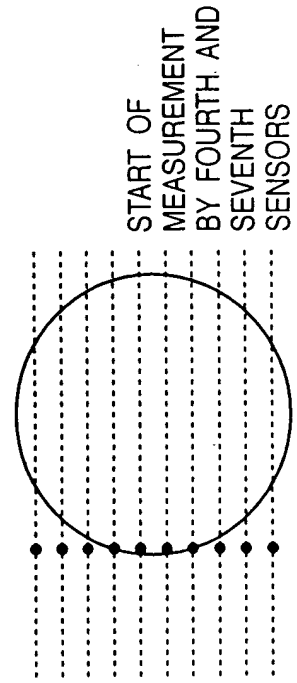


FIG. 14D

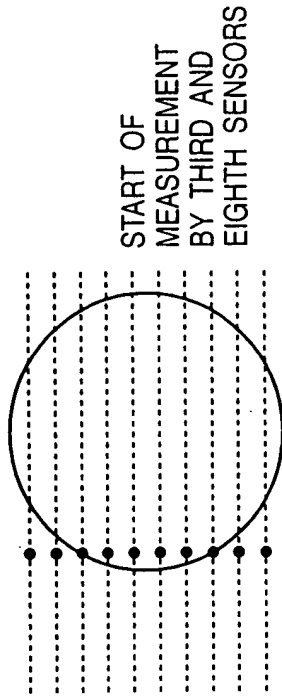


FIG. 14E

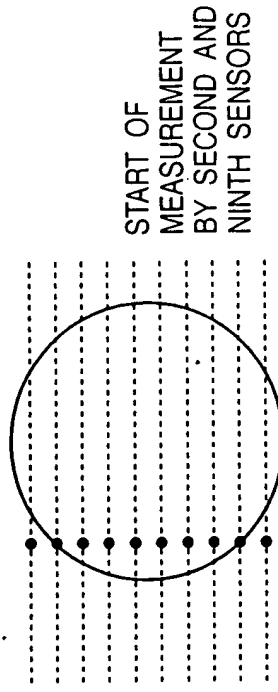


FIG. 14F

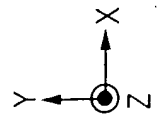
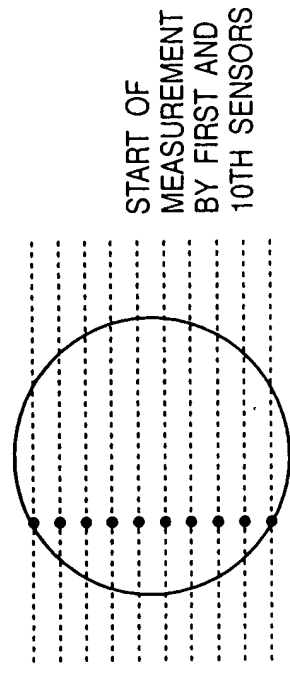


FIG. 15A

MEASUREMENT
OF WAFER
CENTER

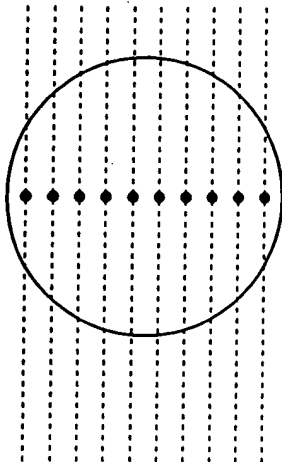


FIG. 15B

END OF
MEASUREMENT
BY FIRST AND
10TH SENSORS

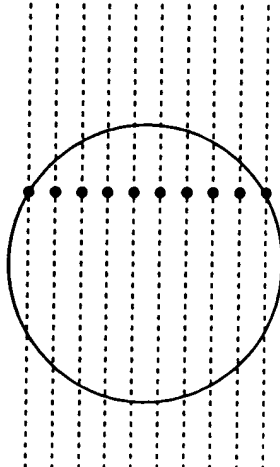


FIG. 15C

END OF
MEASUREMENT
BY SECOND AND
NINTH SENSORS

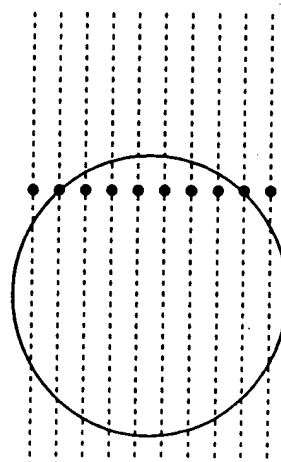


FIG. 15D

END OF
MEASUREMENT
BY THIRD AND
EIGHTH SENSORS

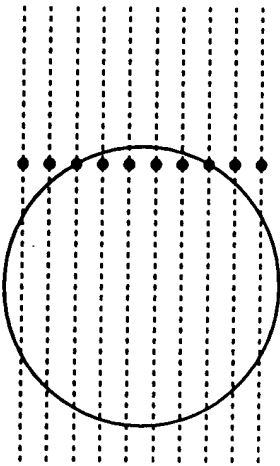


FIG. 15E

END OF
MEASUREMENT
BY FOURTH AND
SEVENTH SENSORS

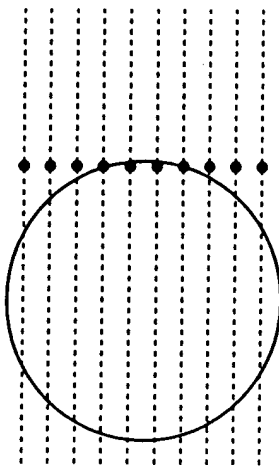


FIG. 15F

END OF
MEASUREMENT
BY FIFTH AND
SIXTH SENSORS

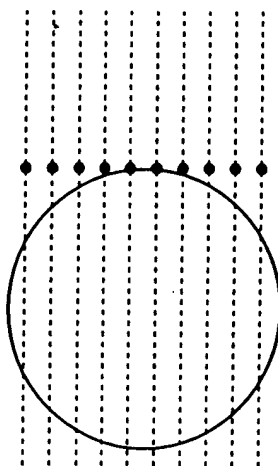


FIG. 15G

AFTER END OF
SENSOR
MEASUREMENT

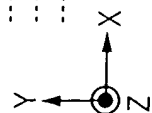
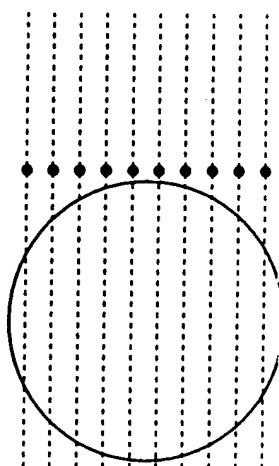


FIG. 16A DRIVE CURRENT
OF FIRST
SENSOR PROBE

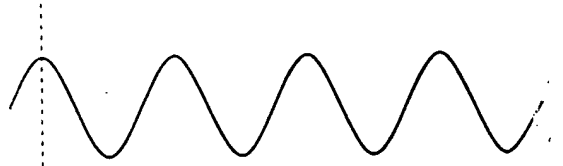


FIG. 16B DRIVE CURRENT
OF SECOND
SENSOR PROBE



FIG. 16C DRIVE CURRENT
OF THIRD
SENSOR PROBE



FIG. 16D DRIVE CURRENT
OF FOURTH
SENSOR PROBE

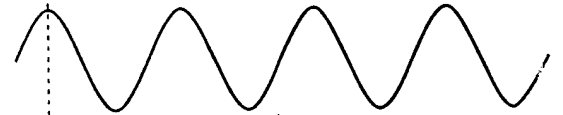


FIG. 16E DRIVE CURRENT
OF FIFTH
SENSOR PROBE



FIG. 16F DRIVE CURRENT
OF SIXTH
SENSOR PROBE



FIG. 16G DRIVE CURRENT
OF SEVENTH
SENSOR PROBE



FIG. 16H DRIVE CURRENT
OF EIGHTH
SENSOR PROBE



FIG. 16I DRIVE CURRENT
OF NINTH
SENSOR PROBE



FIG. 16J DRIVE CURRENT
OF 10TH
SENSOR PROBE



FIG. 17A

GROUND CURRENT
AMPLITUDE VALUE
(RELATIVE VALUE)

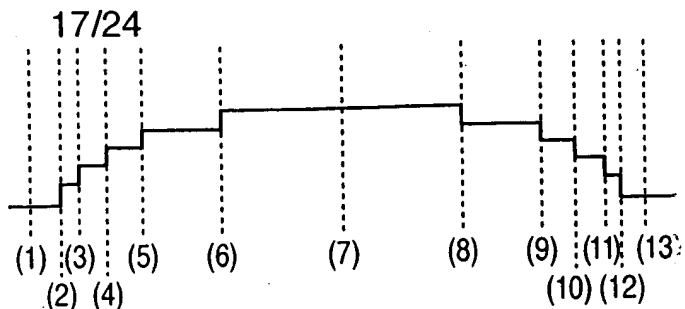


FIG. 17B

MEASUREMENT
VALUE OF FIRST
SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

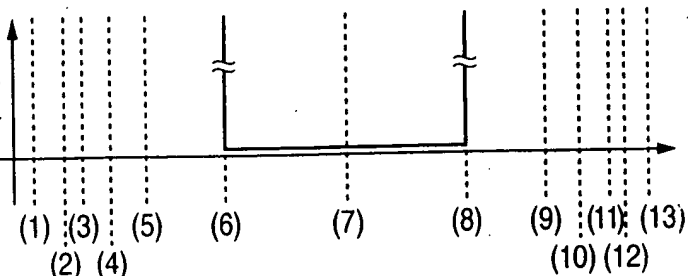


FIG. 17C

MEASUREMENT
VALUE OF
SECOND SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

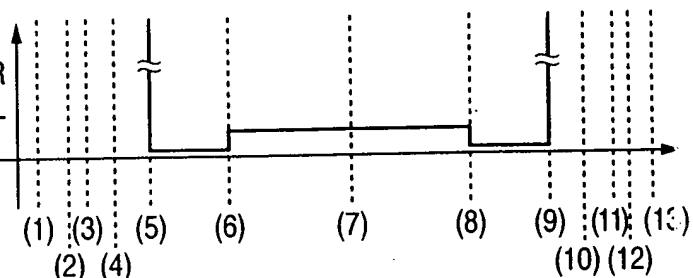


FIG. 17D

MEASUREMENT
VALUE OF
THIRD SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

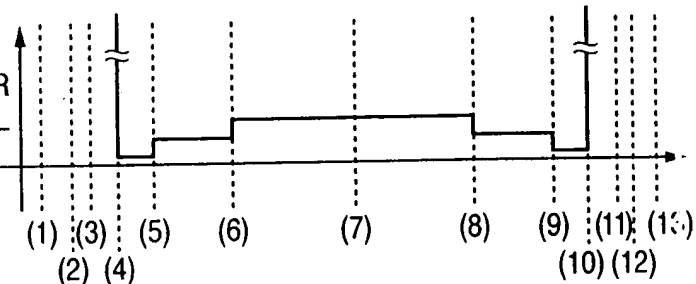


FIG. 17E

MEASUREMENT
VALUE OF
FOURTH SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

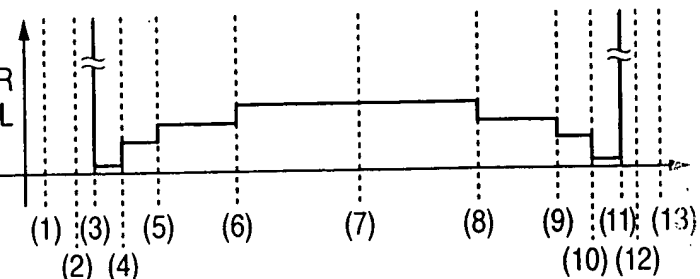


FIG. 17F

MEASUREMENT
VALUE OF
FIFTH SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

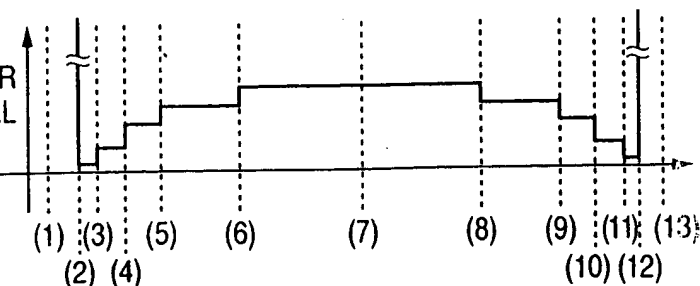


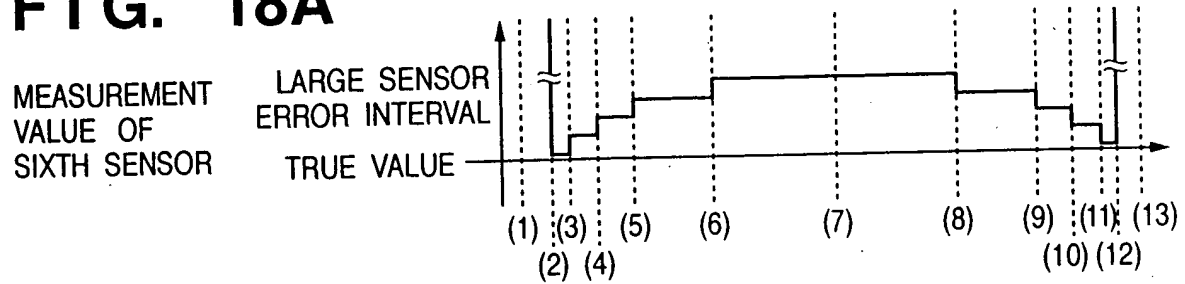
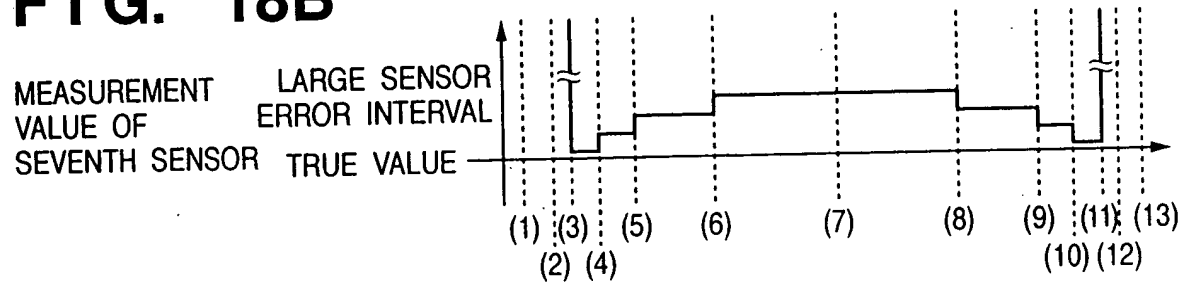
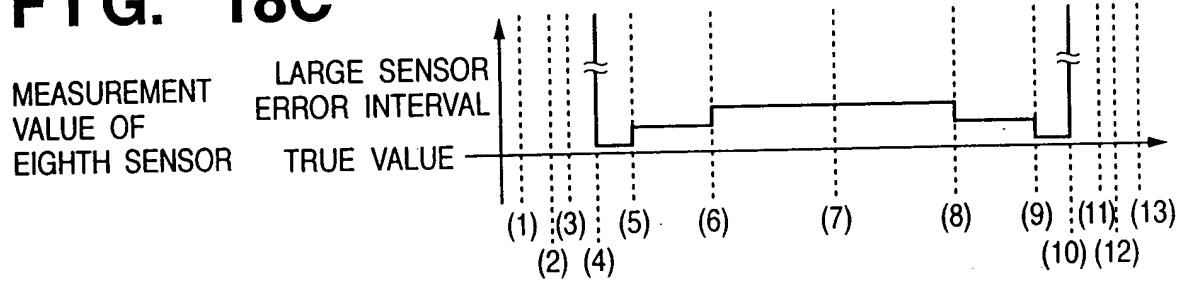
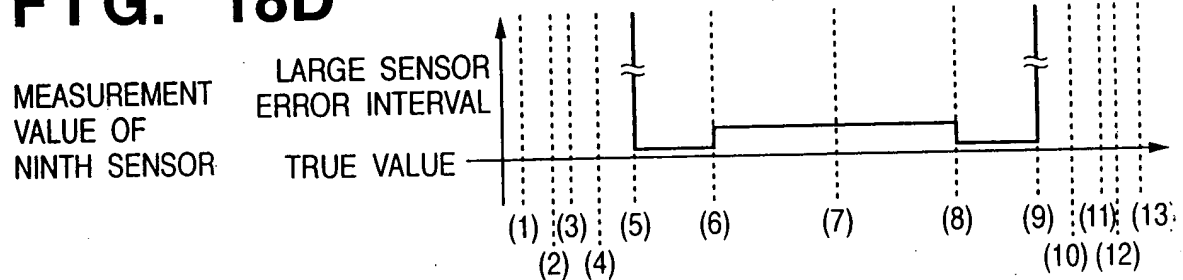
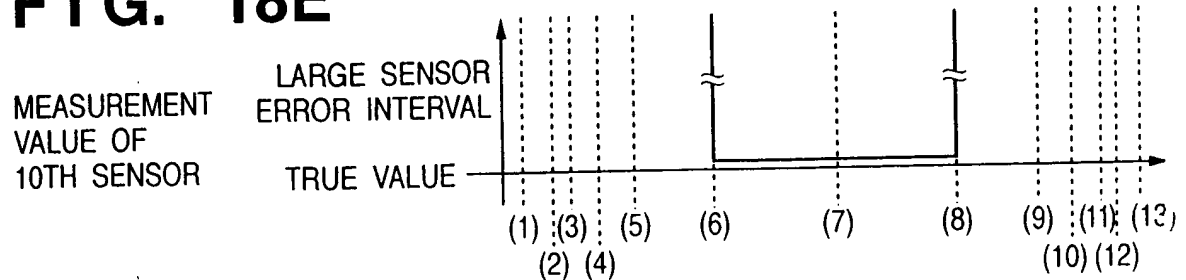
FIG. 18A**FIG. 18B****FIG. 18C****FIG. 18D****FIG. 18E**

FIG. 19A DRIVE CURRENT
OF FIRST
SENSOR PROBE

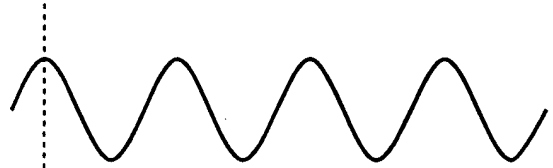


FIG. 19B DRIVE CURRENT
OF SECOND
SENSOR PROBE



FIG. 19C DRIVE CURRENT
OF THIRD
SENSOR PROBE



FIG. 19D DRIVE CURRENT
OF FOURTH
SENSOR PROBE



FIG. 19E DRIVE CURRENT
OF FIFTH
SENSOR PROBE



FIG. 19F DRIVE CURRENT
OF SIXTH
SENSOR PROBE



FIG. 19G DRIVE CURRENT
OF SEVENTH
SENSOR PROBE



FIG. 19H DRIVE CURRENT
OF EIGHTH
SENSOR PROBE



FIG. 19I DRIVE CURRENT
OF NINTH
SENSOR PROBE

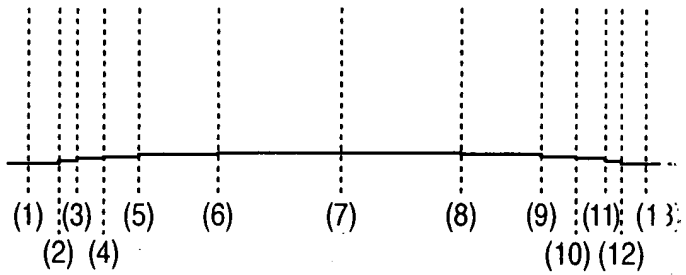


FIG. 19J DRIVE CURRENT
OF 10TH
SENSOR PROBE



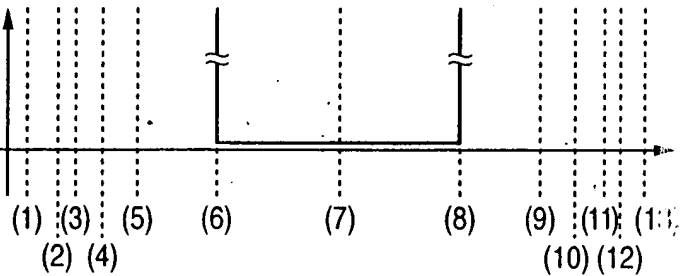
FIG. 20A

GROUND CURRENT
AMPLITUDE VALUE
(RELATIVE VALUE)

**FIG. 20B**

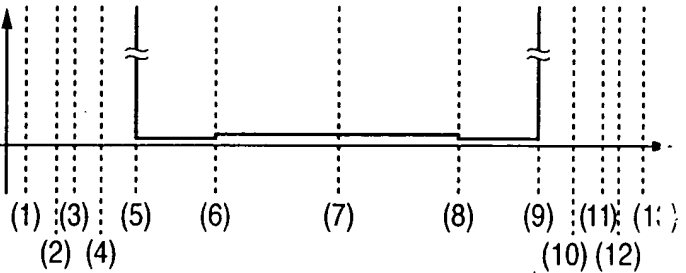
MEASUREMENT
VALUE OF
FIRST SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

**FIG. 20C**

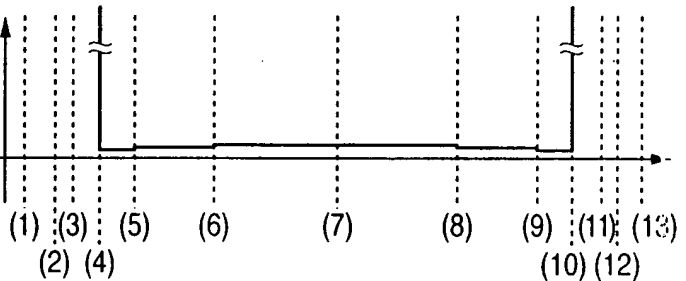
MEASUREMENT
VALUE OF
SECOND SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

**FIG. 20D**

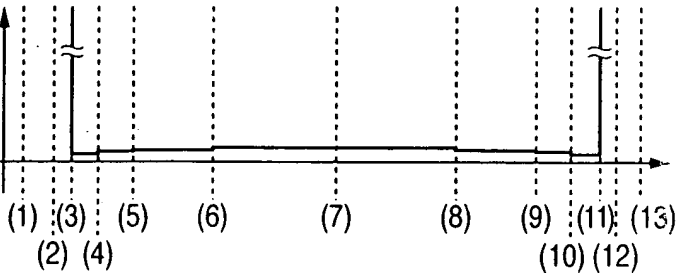
MEASUREMENT
VALUE OF
THIRD SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

**FIG. 20E**

MEASUREMENT
VALUE OF
FOURTH SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

**FIG. 20F**

MEASUREMENT
VALUE OF
FIFTH SENSOR

LARGE SENSOR
ERROR INTERVAL
TRUE VALUE

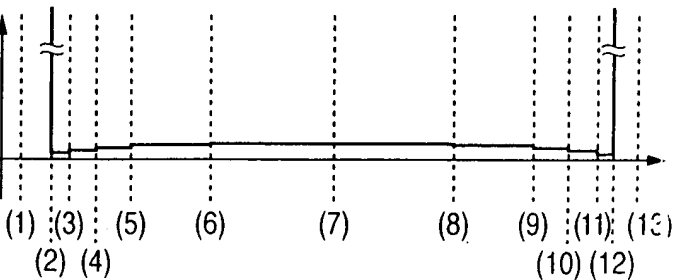


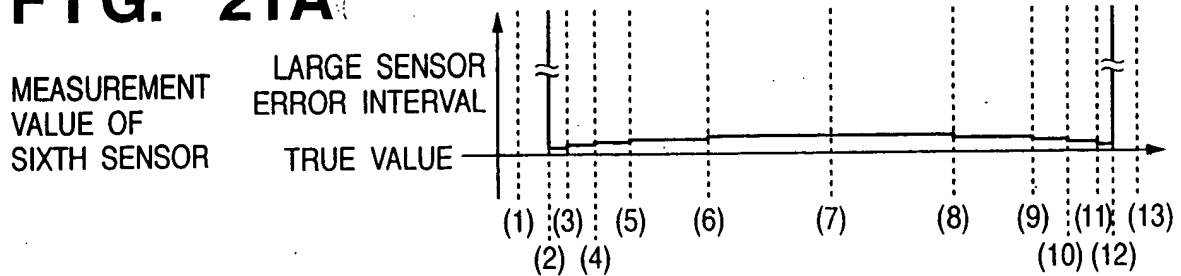
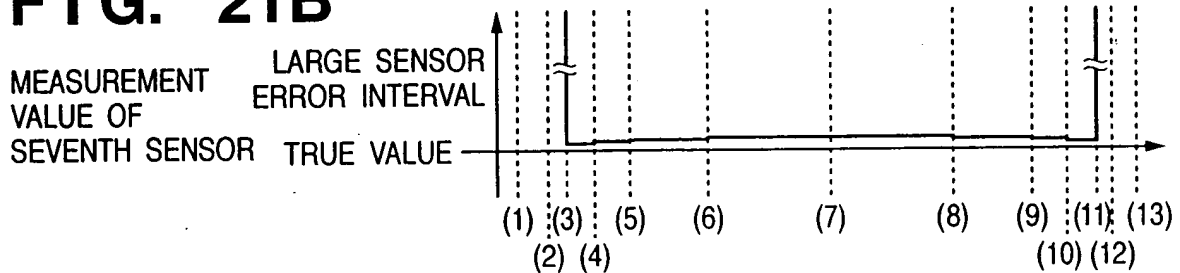
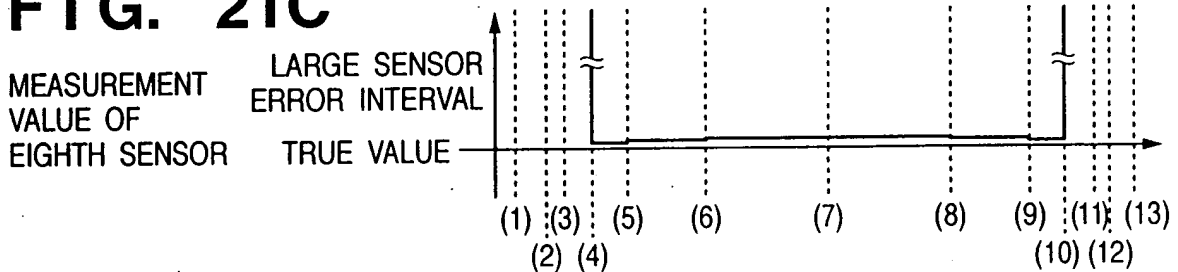
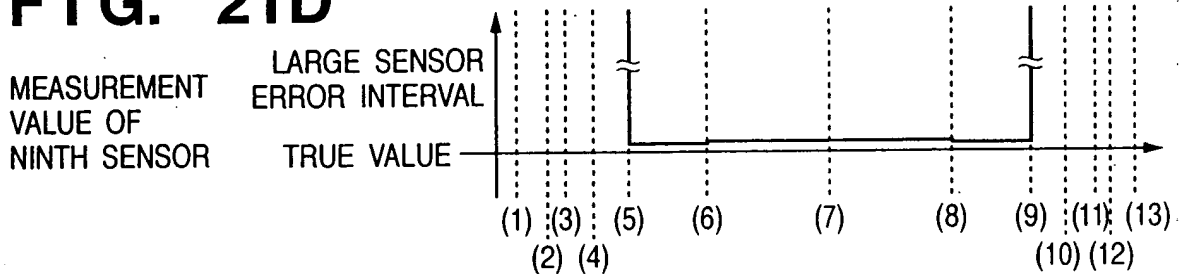
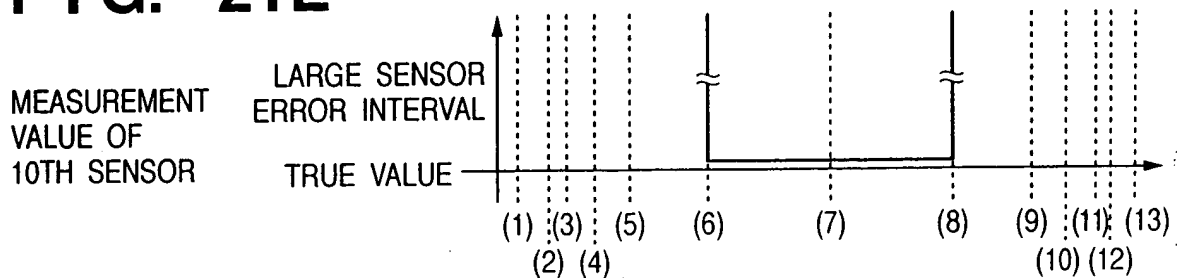
FIG. 21A**FIG. 21B****FIG. 21C****FIG. 21D****FIG. 21E**

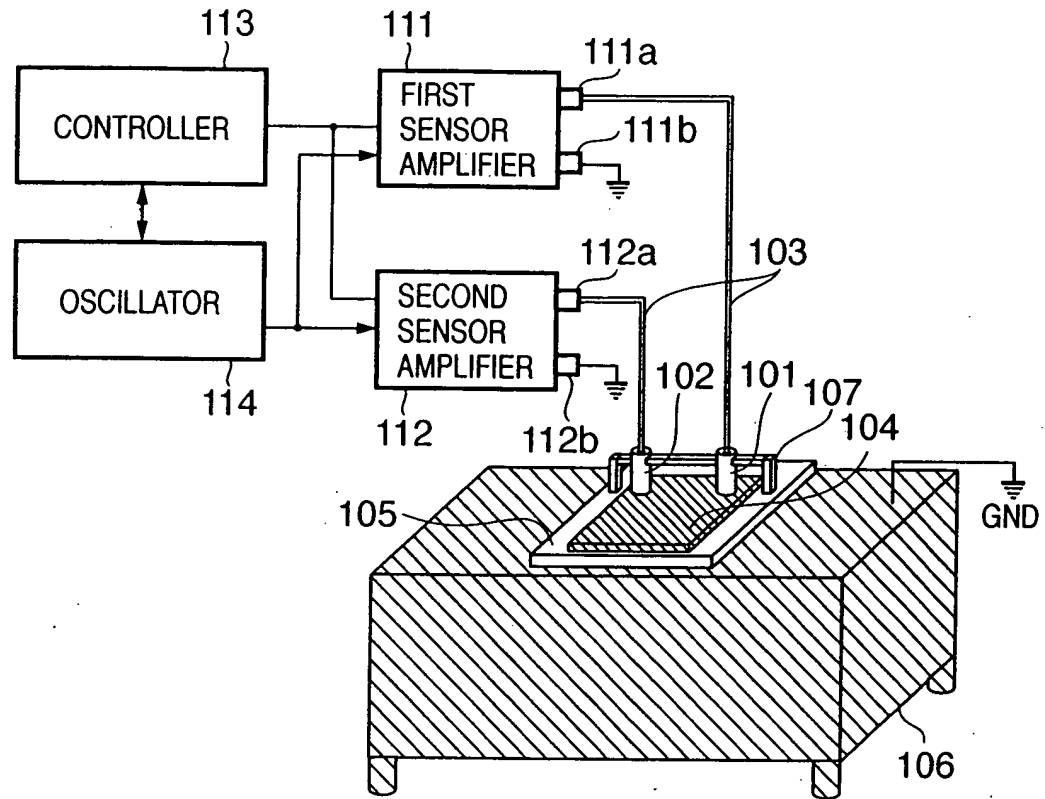
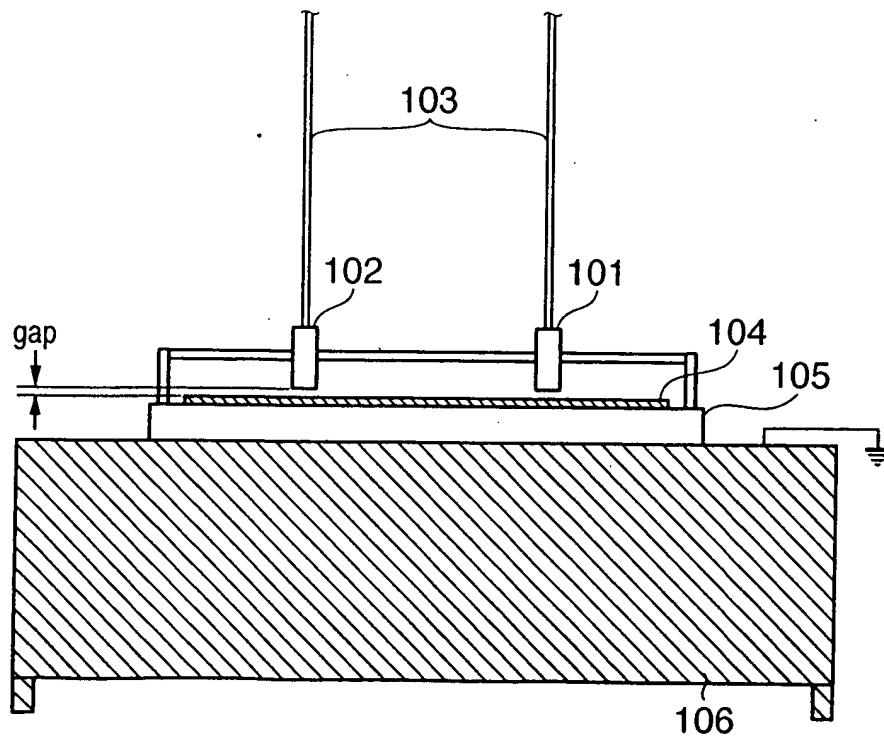
FIG. 22A**FIG. 22B**

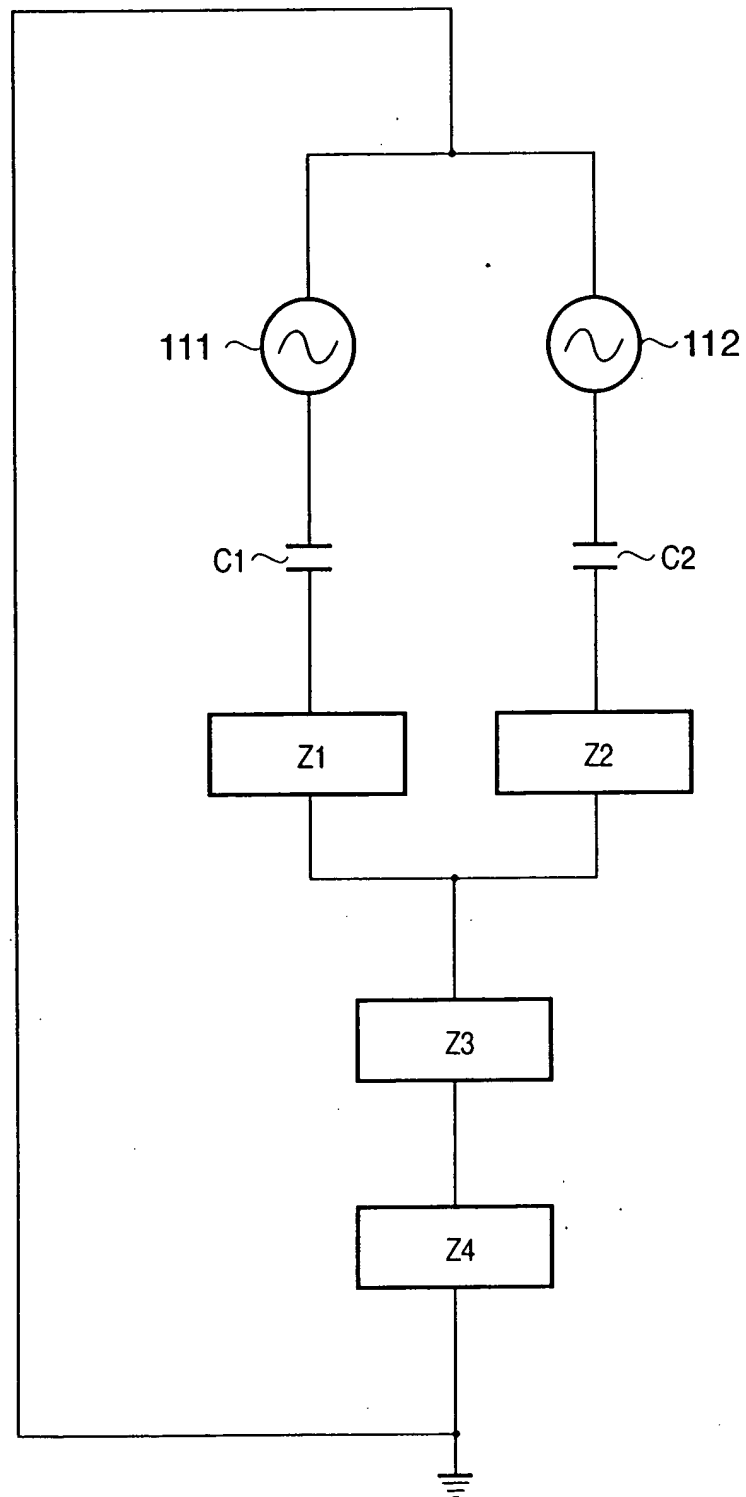
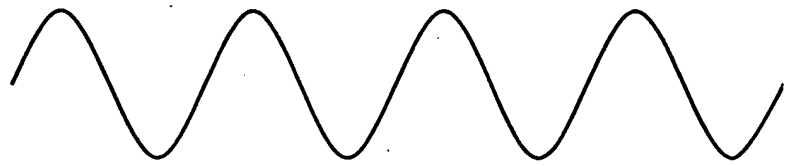
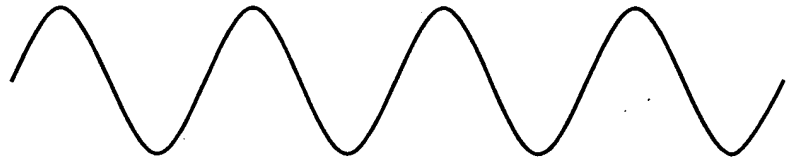
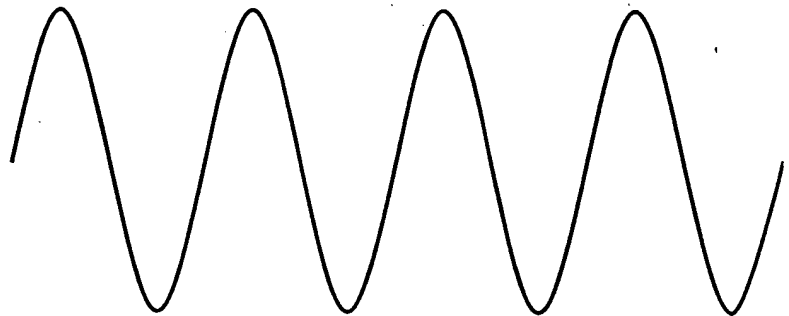
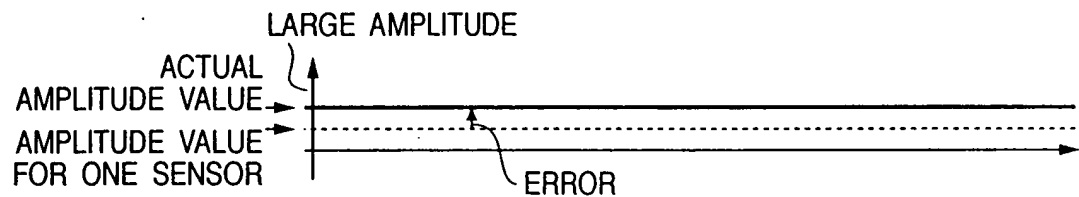
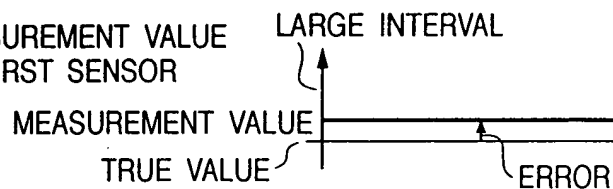
FIG. 23

FIG. 24ADRIVE CURRENT OF FIRST
SENSOR PROBE**FIG. 24B**DRIVE CURRENT OF
SECOND SENSOR PROBE**FIG. 24C**

GROUND CURRENT

**FIG. 24D**

GROUND CURRENT AMPLITUDE VALUE (RELATIVE VALUE)

**FIG. 24E**MEASUREMENT VALUE
OF FIRST SENSOR**FIG. 24F**MEASUREMENT VALUE
OF SECOND SENSOR